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| 09/552,590 | 04/19/2000 | Tsukasa Sako | 35.C14439 | 4087 |

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EXAMINER

JERABEK, KELLY L

| ART UNIT | PAPER NUMBER |
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2612

DATE MAILED: 12/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/552,590

Applicant(s)

SAKO, TSUKASA

Examiner

Kelly L. Jerabek

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 April 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION***Drawings***

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: Figure 1: 2; figure 2: 21; figure 3: 301, 303, 304, 307, 308, 309; figure 4: 401, 402. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "10" has been used to designate both an A/D converter and an exposure enabling switch. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities: Page 4, line 15 "study ID 63" should be "study ID 61". Page 20, line 7 "study ID 63" should be "study ID 61".

Appropriate correction is required.

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Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and **generally limited to a single paragraph** on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Objections

Claim 10 objected to because of the following informalities: The claim recites on page 27, line 27 "An image processing apparatus according to claim 7". The claim should read "An image processing apparatus according to claim 8". Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-28 rejected under 35 U.S.C. 103(a) as being unpatentable over Taguchi et al. US 5,807,256 in view of Yoshida US 5,640,628.

Re claim 1, Taguchi discloses a medical information processing system (fig. 1). The medical information processing system includes an image acquisition unit (fig. 1: 2a, 2b). Image taking conditions such as examination portion and examination procedure are set according to an instruction of the examination request information (col. 103, lines 24-47; fig. 132). An image is produced in the image acquisition unit (fig. 1: 2a; col. 103, lines 40-43). The image is then stored (col. 103, lines 44-48). The photographic camera also determines whether an image taken under the same image taking condition is present in the storage means (col. 18, lines 60-67). However, Taguchi does not disclose discrimination means to discriminate whether an already taken image is present in the storage means. Furthermore, Taguchi does not disclose an output control means to output an image taken later as a re-taken image.

Yoshida discloses a photographic camera (fig. 1). The photographic camera determines whether an image taken under the same image taking condition is present in the storage means (col. 18, lines 60-67). If the discrimination means determines that the already taken image is present, the image taken later is output as a re-taken image (col. 19, lines 1-7). Storing both original and re-taken images of the same image taking condition is advantageous

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because it allows the user to select an image that has optimal characteristics.

For this reason, it would have been obvious to include discrimination and output control means as taught in Yoshida in the medical information processing system disclosed by Taguchi. Doing so would provide a means for allowing the user to take a plurality of images in order to ensure that an image of acceptable quality is obtained.

Re claim 2, Yoshida discloses a photographic camera that saves photographed images on photographic film (fig. 9: 30g; col. 19, lines 1-7). This film stores both original and re-taken images.

Re claim 3, Taguchi discloses an overlay data creator (fig. 3: 41). The overlay data creator (fig. 3: 41) affixes identifying information such as abnormalities to the received image (col. 18, lines 60-67; figs. 151, 152).

Re claim 4, Taguchi discloses a selection means for selecting an arbitrary image (col. 7, lines 27-33). When a user desires to delete the abnormality extracted by the CAD processing unit (fig. 2: 4e), the identification information (abnormalities) are erased by selecting the desired area using a cursor (col. 125, lines 41-45). In addition, when a user discovers an abnormality that was not extracted by the CAD processing unit 9fig. 2: 4e), the identification information (abnormalities) can be added to the image by selecting the desired area to add the information using a cursor (col. 125, lines 30-41).

Re claim 5, Taguchi states that an image not bearing identification information (abnormalities) is externally transferred (col. 23, lines 42-49; fig. 2: 4i). The original image does not contain the identification information (abnormalities) and it is externally transferred to a display (fig. 2: 4i).

Re claim 6, Taguchi states that taken images of same attribute information are collectively transferred (col. 103, lines 49-53). Examination histories of patients contain images of the same attribute (fig. 134 A, 134 B). When the examination histories are transferred, images of the same attribute information are collectively transferred (col. 103, lines 49-61).

Re claim 7, the image taking conditions of Taguchi include the name of an inspected person, an image taking body part, and other features (figs. 134A, 134B).

Re claim 8, Taguchi discloses a medical information processing system (fig. 1). The medical information processing system includes an image acquisition unit (fig. 1: 2a, 2b). Image taking conditions such as examination portion and examination procedure are set according to an instruction of the examination request information (col. 103, lines 24-47; fig. 132). An image is produced in the image acquisition unit (fig. 1: 2a; col. 103, lines 40-43). The image is then stored (col. 103, lines 44-48). The photographic camera also

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determines whether an image taken under the same image taking condition is present in the storage means (col. 18, lines 60-67). Taguchi also includes selection means for selecting an arbitrary image (col. 7, lines 27-33). However, Taguchi does not disclose re-taking instructing means for instructing re-taking of an image. Furthermore, Taguchi does not disclose an output control means to output an already taken image and a re-taken image in a mutually identifiable manner.

Yoshida discloses a photographic camera (fig. 1). The photographic camera includes re-taking instruction means (fig. 12: 242) for instructing re-taking of an image (col. 17, lines 34-42). If image re-taking is instructed, an already taken image and a re-taken image are both output onto the photographic film (fig. 9: 30g; col. 19, lines 1-19). Storing both original and re-taken images of the same image taking condition is advantageous because it allows the user to select an image that has optimal characteristics. For this reason, it would have been obvious to include re-taking instruction and output control means as taught in Yoshida in the medical information processing system disclosed by Taguchi. Doing so would provide a means for allowing the user to take a plurality of images in order to ensure that an image of acceptable quality is obtained.

Re claim 9, Yoshida discloses image re-taking means for executing image re-taking (col. 17, lines 34-39).

Re claim 10, Taguchi discloses examination histories of patients that contain images of the same attribute (fig. 134 A, 134 B). Attribute information such as "object" is the same for multiple images (figs. 134A, 134B).

Re claim 11, Taguchi discloses an output control means adapted in outputting an image to which the same attribute is attached (fig. 134B, object). The output control means outputs the already taken image with identification information (fig. 134A, patient name). The mentioned examination histories of figures 134A and 134B are output (col. 103, lines 38-59). Furthermore, when a user desires to delete the abnormality extracted by the CAD processing unit (fig. 2: 4e), the identification information (abnormalities) are erased by selecting the desired area using a cursor (col. 125, lines 41-45). In addition, when a user discovers an abnormality that was not extracted by the CAD processing unit 9fig. 2: 4e), the identification information (abnormalities) can be added to the image by selecting the desired area to add the information using a cursor (col. 125, lines 30-41).

Re claim 12, Taguchi states that an image not bearing identification information (abnormalities) is externally transferred (col. 23, lines 42-49; fig. 2:

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4i). The original image does not contain the identification information (abnormalities) and it is externally transferred to a display (fig. 2: 4i).

Re claim 13, Taguchi states that taken images of same attribute information are collectively transferred (col. 103, lines 49-53). Examination histories of patients contain images of the same attribute (fig. 134 A, 134 B). When the examination histories are transferred, images of the same attribute information are collectively transferred (col. 103, lines 49-61).

Re claim 14, see claim 1.

Re claim 15, see claim 2.

Re claim 16, see claim 3.

Re claim 17, see claim 4.

Re claim 18, see claim 5.

Re claim 19, see claim 6.

Re claim 20, see claim 7.

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Re claim 21, see claim 8.

Re claim 22, see claim 9.

Re claim 23, see claim 10.

Re claim 24, see claim 11.

Re claim 25, see claim 12.

Re claim 26, see claim 13.

Re claim 27, Taguchi discloses a system disk (fig. 2: 4b) that stores programs and reads out these programs when electric power is switched on to supply them to a system memory within the control memory (fig. 2: 4a). See also col. 14, lines 51-54). For the rest of claim 27, see claim 14.

Re claim 28, Taguchi discloses a system disk (fig. 2: 4b) that stores programs and reads out these programs when electric power is switched on to supply them to a system memory within the control memory (fig. 2: 4a). See also col. 14, lines 51-54). For the rest of claim 28, see claim 21.

Conclusion

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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Strawder (US 6282513) discloses a quality assurance method for a machine and an operator.

Hanaki (US 6,155,683) discloses an ophthalmic apparatus for photographing an eye to be examined.

Sakata et al. (US 6,593,938) discloses an image processing apparatus, method and computer-readable recording medium with program recorded thereon, for joining images together by using visible joining points and correcting image distortion easily.

Echerer et al. (US 6,526,097) discloses a radiographic image evaluation apparatus and method.

Contacts

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Kelly Jerabek whose telephone number is (703) 305-8659. The examiner can normally be reached on Monday - Friday (8:00 AM - 5:00 PM).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's primary examiner, Wendy Garber can be reached at (703)-305-4929.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

The fax number for submitting all Official communications is (703) 872-9306. The fax number for submitting informal communications such as drafts, proposed amendments, etc., may be faxed directly to the Examiner at (703) 746-3059.

KLJ

VU LE
PRIMARY EXAMINER